

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-53. (Canceled)

54. (Currently Amended) A method of processing digital mobile phone network data for analysis, the method comprising:

inputting network data captured from a digital mobile phone network, said network data comprising data for a plurality of communications sessions over said network, said network data including a plurality of session related parameters;

~~organizing said captured network data by communication session by dividing said captured network data into a plurality of data structures, one for each said communication session;~~

inputting query data for one or more queries, a query defining a statistic relating to one or more of said parameters, to be computed from said network data;

formatting a said query to define said statistic in terms of one or more intermediate statistics relating to said one or more parameters and to be computed from said network data, said statistic being computable from said one or more intermediate statistics;

~~operating, after said organizing,~~ with said formatted query on said captured network data to determine said one or more intermediate statistics;

storing one or more sets of said one or more intermediate statistics in a data store for analysis; ~~and~~

~~storing an identifier of said plurality of data structures whereby said data structures are accessible one at a time when statistical analysis indicates which session should be examined~~

providing said plurality of session related parameters to a data pipe configured to store a time-ordered series of sets of entries by storing said sets of entries at respective time positions of said data pipe, said data pipe comprising at each said time position a storage location allocated to

each parameter of a set of expected parameters, said providing comprising writing session related parameters of a message into respective said storage locations corresponding to said session related parameters of said message;

operating a first query by reading parameters at a first said time position on said data pipe;

storing a result of said first query in a said storage location of said data pipe; and

operating a second query by reading parameters at a second said time position on said data pipe later than said first position and by reading said stored result.

55. (Previously Presented) A method as claimed in claim 54 wherein said storing comprises storing said one or more intermediate statistics relating to said one or more parameters indexed by said one or more parameters.

56. (Canceled)

57. (Currently Amended) A method as claimed in claim ~~[[56]]~~ 54 wherein said storing comprises storing said one or more intermediate statistics indexed by an identifier of a said communications session.

58-60. (Canceled)

61. (Previously Presented) A method as claimed in claim 54 wherein said data store comprises a database, the method further comprising determining a configuration for said database using said inputted query data.

62. (Currently Amended) A method as claimed in claim 54 further comprising analysing data in said data store, said analysing comprising:

inputting selection data defining selected ones of said one or more parameters;

reading said one or more intermediate statistics for said related parameters; and
determining at least one said statistic for said related parameters from said one or more
intermediate statistics.

63. (Previously Presented) A method as claimed in claim 62 wherein said selection data
comprises marketing or customer service report data.

64. (Currently Amended) A system for processing digital mobile phone network data for
analysis, the system comprising:

means for inputting network data captured from a digital mobile phone network, said
network data comprising data for a plurality of communications sessions over said network, said
network data including a plurality of session related parameters;

~~means for organising said captured network data by communication session, said means
dividing said captured network data into a plurality of data structures, one for each said
communications session;~~

means for inputting query data for one or more queries, a query defining a statistic
relating to one or more of said parameters, to be computed from said network data;

means for formatting a said query to define said statistic in terms of one or more
intermediate statistics relating to said one or more parameters and to be computed from said
network data, said statistic being computable from said one or more intermediate statistics;

~~means for operating, after the captured network data has been organised,~~ with said
formatted query on said captured network data to determine said one or more intermediate
statistics;

means for storing said one or more intermediate statistics in a data store for analysis; ~~and~~

~~means for storing an identifier of said plurality of data structures whereby said data
structures are accessible one at a time when statistical analysis indicates which session should be
examined~~

means for providing said plurality of session related parameters to a data pipe configured to store a time-ordered series of sets of entries by storing said sets of entries at respective time positions of said data pipe, said data pipe comprising at each said time position a storage location allocated to each parameter of a set of expected parameters, said providing comprising writing session related parameters of a message into respective said storage locations corresponding to said session related parameters of said message;

means for operating a first query by reading parameters at a first said time position on said data pipe;

means for storing a result of said first query in a said storage location of said data pipe;
and

means for operating a second query by reading parameters at a second said time position on said data pipe later than said first position and by reading said stored result.

65-67. (Canceled)

68. (Currently Amended) A method of processing digital mobile phone network data for analysis, the method comprising:

inputting network data captured from a digital mobile phone network, said network data comprising data for a plurality of communications sessions over said network, said network data including a plurality of session related parameters;

dividing said captured network data into a plurality of data structures, one for each said communications session;

processing said divided data in accordance with one or more queries to generate statistical data for each of a plurality of said sessions, said query defining at least one statistic relating to one or more said parameters;

storing, in a data store, said statistical data for each of said sessions in association with a session identifier;

~~whereby~~ wherein network data for a session used to generate said statistical data is retrievable, the method further comprising:

providing said plurality of session related parameters to a data pipe configured to store a time-ordered series of sets of entries by storing said sets of entries at respective time positions of said data pipe, said data pipe comprising at each said time position a storage location allocated to each parameter of a set of expected parameters, said providing comprising writing session related parameters of a message into respective said storage locations corresponding to said session related parameters of said message;

operating a first query by reading parameters at a first said time position on said data pipe;

storing a result of said first query in a said storage location of said data pipe; and
operating a second query by reading parameters at a second said time position on said data pipe later than said first position and by reading said stored result.

69. (Previously Presented) A method as claimed in claim 68 wherein said statistical data comprises statistical data aggregatable to provide said at least one statistic for a combination of two or more said sessions.

70. (Previously Presented) A method as claimed in claim 68 wherein said processing comprises operating on each said data structure to generate said statistical data.

71. (Previously Presented) A method as claimed in claim 68 wherein said storing comprises storing indexed by one or more of said parameters.

72. (Previously Presented) A method as claimed in claim 68 wherein said processing is performed in parallel for said plurality of data structures.

73. (Currently Amended) A system for processing digital mobile phone network data for analysis, the system comprising:

means for inputting network data captured from a digital mobile phone network, said network data comprising data for a plurality of communications sessions over said network, said network data including a plurality of session related parameters;

means for dividing said captured network data into a plurality of data structures, one for each said communications session;

means for processing said divided data in accordance with one or more queries to generate statistical data for each of a plurality of said sessions, a said query defining at least one statistic relating to one or more of said parameters; and

means for storing, in a data store, said statistical data for each of said sessions in association with a session identifier;

~~means for storing an identifier of said plurality of data structures whereby wherein network data for a session used to generate said statistical data is retrievable with said data structures being accessible one at a time when statistical analysis indicates which session should be examined,~~ the system further comprising:

means for providing said plurality of session related parameters to a data pipe configured to store a time-ordered series of sets of entries by storing said sets of entries at respective time positions of said data pipe, said data pipe comprising at each said time position a storage location allocated to each parameter of a set of expected parameters, said providing comprising writing session related parameters of a message into respective said storage locations corresponding to said session related parameters of said message;

means for operating a first query by reading parameters at a first said time position on said data pipe;

means for storing a result of said first query in a said storage location of said data pipe;
and

means for operating a second query by reading parameters at a second said time position on said data pipe later than said first position and by reading said stored result.

74. (Previously Presented) A system as claimed in claim 73 wherein said statistical data comprises data for intermediate statistics, said system further comprising:

means for inputting query data defining said one or more queries;

means for formatting a said query to define a said statistic in terms of one or more intermediate statistics relating to said one or more parameters and to be computed from said network data, said statistic being computable from one or more sets of said one or more intermediate statistics;

means for operating with said formatted query on said captured network data to determine said one or more intermediate statistics; and

means for storing said intermediate statistics in said data store for analysis.

75. (Previously Presented) A system as claimed in claim 73 further comprising a plurality of processors, each said data structure having an associated processor to perform said processing and to send said statistical data for a session over a network to said data store.

76-97. (Canceled)